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THE GENESEE FARMER.

SATURDAY, JULY 27, 1839.

IMPROVED STOCK.

We had the pleasure of examining a lot of improved stock, which passed through this city on Saturday last on their way to Kentucky. It was the property of HARRISON BLANTON, Esq. of Frankfort, and was purchased, with one exception, of T. WEDDLE, Esq. of East Bloomfield, Ontario County, N. Y. The following is a list of the animals:

Bull *Roman*—Dam Primrose, by Rover, both imported by Mr. Weddle, and both now owned by Gen. Dudley of Kentucky. Roman is a beautiful roan, 15 months old, for which Mr. H. paid $500.

A pair of twin Heifers, *Diana* and *Prize*—Dam Crocus, by Rover—same age and color as Roman, $1000 for the pair.

One Heifer, *Miss Bower*—Dam Lady Bower, by Rover. Red and white—10 months old, $600.

Bull calf, *Union*, pure white, 8 months old—Dam Darlington, by Eclipse, bought of Mr. JOHN BAKER of Wayne County, for $250.

Five New Leicester Bucks—four bred by Mr. Weddle from imported stock, and one, *John Marshall*, imported by him last autumn.

One New Leicester Ewe, *Maria*—bred by Mr. W., and one pair Leicestershire Pigs.

The estimation in which the four first animals on the list, are held by both breeder and purchaser, will be seen in the prices received—prices rarely reached for animals of that age; and we doubt whether they could be excelled by the same number from any single herd in the country. *Miss Bower* decidedly bears the palm over any animal of her age, which has ever fallen under our notice; and the lot does great credit to the skill and taste of Mr. Weddle as a breeder of Improved Short Horns.

Of the sheep, we may mention the imported Buck and the Ewe, as very superior. The Ewe, *Maria*, was one Mr. W. reserved from his last year's sale for his own use, and was, with the pair of Leicestershire Pigs, a present from Mr. Weddle to Mr. Blanton.

PROPOSITION.

We have received from I. M. Millikin, Esq. of Hamilton, Butler Co., Ohio, a printed sheet containing a proposition to the farmers of that county to raise one thousand dollars to be divided into three premiums of 500, 300 and 200 dollars each, to be awarded in the year 1842 to the owners of the three best cultivated farms in the county, the farms not to be of less size than 100 acres, or not less than 80 under cultivation. The proposition appears to be conceived in the most liberal spirit, and among the spirited farmers of that prosperous county should, we think, meet with a favorable reception. We regret that our limits will not admit the insertion of the entire paper, as the propriety and benefit of the course proposed is well and strongly stated, and might be of service in other districts of our country. The following extract will show the objects aimed at in the proposition, and the kind of farming it is desired to extend and reward:

"XIII. The committee in deciding on the farms, and in awarding the premiums, shall take into consideration the following, with other matters, to wit:

1st. The size of the farm, it being less difficult to cultivate well *ten acres* of land than to cultivate in like manner *fifty*.

2d. Its arrangement, or subdivisions, and size of fields.

3d. The fences, their kinds, quality and suitableness for the purpose used.

4th. The improvements, including farm house, barn and other necessary buildings—their quality—adaptation to the size of farm and family—to the business carried on, and to the number and kind of stock. The buildings to be judged of in reference to their necessity or suitableness, to the proper enjoyment of the farm. Taste not to be disregarded. Excess of expenditures over what may be deemed necessary or useful, not to be considered.

5th. Mode of culture, and its adaptation to the condition and quality of the soil.

6th. The quality and quantity of stock, with reference to the kind of farm, and its ability to sustain the stock.

7th. The manure employed to improve and sustain the fertility of impoverished lands.

8th. The manuring of lands generally, with the mode adopted for making and using manures.

9th. The alternation of crops.

10th. The tillage of the land.

11th. The implements of husbandry used.

12th. The fruit of the farm—its quality and adaptation to the farm—and the efforts made to propagate suitable and proper varieties.

13th. The garden—its cultivation, and the number and variety of useful plants, shrubs, &c. pertaining to the farmer's garden.

14th. The best and most economical mode of fattening stock, and of propagating and raising young stock.

15th. The neatness, order, and propriety with which the work is done about the farm; and in fine, every thing connected with the proper and judicious management of a farm, according to the best and most approved systems of husbandry."

This extract will show that the proposition has been made by men who have not only the interests of agriculture at heart, but who understand what is required in order to its advancement. Should the wishes of the public-spirited authors of the proposition not be carried into effect, they will have the consolation of knowing that the mere promulgation of such a paper, and the attention it will naturally excite, will be productive of some benefit. We hope, however, the proposition will be met in the spirit in which it has been conceived, and that we shall have the pleasure of recording its entire success, confident as we are that the ultimate benefit would far more than balance the small sums required in the outset.

DAIRY PRODUCE.

One of the most incontestible proofs of the scarcity of cattle in our country is found in the high prices of the products of the dairy. For several years past the dairy business has been an excellent one, but the present year promises to be more favorable than ever. In the first place there has been in most districts an abundance of pasture, owing to the great amount of rain that has fallen which has prevented their drying up; and in the second place there has been an improvement in prices, and an increased demand from the last year. We know of some dairies that are this year selling off their new cheese almost as it comes from the press at $8,00 per cwt., and sales of old cheese are made at from ten to twelve dollars per cwt. Many of our dairies last year averaged 30 dollars per cow in sales of butter and cheese; and the prices of cows this year have been correspondingly high. In closing an estate a few days since, a lot of cows of the common kind was sold at auction, and brought from 35 to 48 dollars each. It is no wonder beef is high and scarce, for when working cattle command from 90 to 120 dollars per pair, and cows such prices as the above, it is clear they are too valuable to be made into beef except at rates which were the facts not as they are must be considered exorbitant. We are glad to perceive indications that the raising of cattle is receiving more attention from our farmers; there was, indeed, abundant need of it.

White Veal in London.

There is no surer indication of a low uncultivated mind, and a cringing, cruel spirit, than barbarity to animals; and when the public taste in any country becomes so vitiated and corrupt as to sanction or require such cruelty to gratify an epicurean appetite, that country is nearly ripe for the domination of a Nero or Cataline. We copy the following from an English work on the 'Obligation and extent of humanity to Brutes,' by Mr. Youatt, the celebrated veterinary surgeon, and writer on Cattle, Horses, &c., in London. After describing the cruel manner in which calves are sent from one district to another of the country, slung in pairs across horses, with their heads hanging down, and the manner in which they are fed by the 'suckling farmer,' he proceeds:

"These calves are brought up to be converted into white veal. The muscles are all to be drained of blood, and not a blemish is to appear on the skin. The animal is taken carefully out of the cart in which he is brought to London. Let it be supposed that he arrives on a Monday afternoon. He is scarcely got out of the cart before the jugular vein is opened, and the blood is permitted to flow until he falls. The morrow comes, and the bleeding is repeated, and again until he falls; and oftener than otherwise, once more on Wednesday.—There are perhaps few of my readers, who have not experienced—when largely bled—this seeming dying, and the worse sensations of returning life. Whoever has passed by the slaughter houses in which these attrocities are committing, and heard the piteous and incessant bleatings of the animal, will never forget the tone of urgent supplication, yet utter debility.

"On the Thursday or Friday he is brought out for slaughter; rolling and staggering from want of strength. A common sling is placed around the hind legs, and he is drawn up into the air, the hind legs uppermost.—Sometimes he gets a knock on the head with a poll-axe, but not sufficient to stun him, for the white veal must not be spoiled, and above all things, the head, that choice morsel for the epicure, must not be discolored. A hook is now passed through his muzzle, to which a cord is attached, that goes round the rope by which he is suspended, and by means of this hook the head is drawn backwards and upwards, until its position is in a manner inverted, and no blood can deposit itself in any part of it. The fatal thrust is now, and not till now, given; the jugulars are cut through at one stroke, and the animal soon dies—the object being accomplished that there shall not be a drop of blood in him, or a discolored mark about him. Such are the abominations which are practiced in the preparation of white veal; and they will continue until the perverted taste of the public no longer demands that the flesh of the calf, shall be rendered pale and insipid, and comparatively void of nutriment."

Mr. Youatt also relates some of the ridiculous observances practiced by the common people in the central districts of the kingdom, which demonstrate, that though the schoolmaster may be abroad, there are parts into which he has not yet penetrated. "In some districts of Yorkshire, about two days before the cow is expected to calve, she is fastened by the horns to the back of a cart and driven sixteen or twenty miles by way of preparing her for parturition. Occasionally the calf is produced by the way; or, many a time and oft, she has a most difficult and dangerous labor. This is another of the abuses and cruelties of ignorance."

Daily Value of Sunshine.

The value of the agricultural products of the United States cannot be less than $500 millions annually. The perfection of this is depending on the weather of four months, June, July, August and September, or about 120 days. Every one knows that without sunshine the crops would be a failure either partially or totally; and hence we can estimate its average daily value at about *four millions of dollars daily.* There can be no doubt, that, considering the nature of the previous weather, the beautiful days preceding the 20th of July added from ten to fifteen millions daily to the value of our agricultural products; yet like many other good things, the very commonness of this invaluable and powerful agent, causes it to be overlooked, and its results undervalued. Without sunshine the earth would soon become another chaos, destitute of order, 'without form and void.'

DICTIONARY
OF
TERMS USED IN AGRICULTURE,
AND IN THE SCIENCES MOST INTIMATELY CONNECTED WITH ITS ADVANCEMENT.

[Continued from page 226.]

CASTRATION. The emasculation of animals, such as calves, pigs, lambs, &c. should be performed as early as the strength of the animal, and other circumstances, will admit. Usually, the only care necessary is to prevent exposure to the cold. Where this is not attended to, serious consequences may result; and we have known flocks of lambs decimated by exposure to a cold rain, immediately after this operation.

CATTLE: a general name comprehending all the animals in the genus *Bos* of Linnæus. There are of course a number of species, such as *bos taurus*, the common ox; *bos caffer*, the wild ox of Africa; *bos urus*, the wild bull of Asia; *bos americana*, the buffalo or bison of the Missouri; and the true buffalo of India, and the musk ox of the Arctic regions. Much labor has been expended in tracing the origin of our domestic races of cattle to the Urus, but we think with little success. At the earliest mention made in history of the ox, he was like the sheep, a domesticated animal, and such he probably descended from the ark upon the plains of Mesopotamia. Domestic cattle become wild with readiness, as the immense herds that roam the pampas of South America at the present time fully prove. Very great improvements have been made in the European breeds of cattle within a few years, principally in England, and that by a few spirited individuals, of whom Bakewell, Collings and Berry, rank among the first. Within 50 years, the average weight of English cattle, as determined at the Smithfield market, has risen one-third; and present appearances do not indicate that this increase has reached its maximum. The great improvements already effected, have been made by judicious crosses, and breeding with reference to certain desirable qualities of form, size, milk, aptitude to fatten, &c., and these objects have been attained in some of the best modern breeds of cattle to an extent that would once have been deemed impossible. It is evident that care must be taken, or there will exist a tendency to retrograde to the original standard; a tendency which will become less and less, as the type and constitution of the improved breeds recede farther from the point of their origin, and of course become more fixed and stable. The breeds of cattle at present most in repute, and beyond all competition in any other varieties, are the Durham or Short Horns, and the Devons. Indeed, it is scarcely possible to conceive of more perfect models of form and beauty among animals, than are to be found among these two kinds of cattle, particularly the high bred varieties of the first named. Great pains have within a few years been taken to introduce into the United States the very best breeds of Europe, and finer herds of cattle are no where to be found than now exist in Kentucky and Ohio, which states have taken the lead in this laudable enterprise. As to the general treatment of cattle, our plan does not embrace it, any further than to remark, that cattle require kind treatment, plenty of good food at all times, and protection from the severity of our winters. On these things, next to skillful breeding, the excellence of cattle is mainly depending.

CELLAR. An important appendage to every dwelling is the cellar, and great care should be taken to have this so arranged that the full benefit desired from it may be obtained. The cellar should be well walled with stone or brick laid in cement; if inclining to be wet, it should be drained so as to present a hard, smooth surface earth, and this will be better if covered with clean gravel. Cellars should wholly exclude frost without being too warm, as fruit and vegetables kept in a warm cellar will not be as good as in one of an equally dry but lower temperature. Since the commencement of the cultivation of roots in this country to a considerable extent; and especially since the making of pork from steamed apples and potatoes has succeeded so well; cellars attached to barns or piggeries have become necessary, and are already constructed in many cases.—Cellars of this kind for the reception of roots, should be made so that cart or wagon loads of fruit or roots can be thrown into them at once, without the labor of repeated handling.

CHALK. Compact limestone, or carbonate of lime, passes into chalk, when the particles that compose the mass are so loosely connected as to render it friable or capable of easy division; in its essential qualities it does not differ materially from unburnt lime. Chalk is extensively used instead of lime for agricultural purposes in many parts of England where it abounds. In the United States there is no chalk, properly so called. The immense beds of white marl, found in some parts of Western New-York, are a near approach to it, and the value of such beds as a resource for easy liming soils, will be better appreciated hereafter than it now seems to be.

CHAFF-CUTTER. In European works on agriculture, straw or hay when cut fine for cattle or horses, and the practice is extensively followed, is called chaff, and the implements by which the cutting is effected is termed a chaff-cutter. In this country, the same implement would be a '*straw-cutter*,' which see.

CHARCOAL. The woody part of trees or vegetables, when burned without flame, becomes a black substance, which has received this name. The base of this substance is carbon, which is formed from the decomposition of carbonic gas by the roots or leaves of the plant. To produce charcoal, the wood is usually burned in pits, or the wood is first closely piled, and then covered with earth, which causes the wood when the fire is applied to burn slowly and expel the water and oils of the plant, without flame, which, if suffered, would reduce the pile to ashes. Charcoal is invaluable in the arts, and is of essential service to the cause of agriculture. It is found that a bed of finely powdered charcoal will ripen melons, &c. if they are placed upon it, when it would otherwise be impossible to bring them to maturity. This property is owing to its rapid absorption of heat from the sun, and the facility with which it parts with it to such substances as are in contact with it.

CHEESE. When the cream has been separated from milk, there remains two of the principles of which it is composed, the caseous and the watery parts. It is from the first of these that curd is produced, and when the watery part or whey is separated from this, and the curd is properly prepared and formed, it constitutes cheese. Heating, or the addition of acids of any kind, will convert milk into curd, but the substance used in the dairy, and which is preferred to all others, is a decoction of the stomach of the calf called rennet. This stomach is prepared by drying with spices and aromatic herbs, and when wanted, is steeped in water or whey, until sufficiently strong to coagulate the milk with readiness. Great care is necessary in preparing and preserving the rennet, as on the quality of this, its sweetness, purity and flavor, much of the goodness of the cheese is depending. There are many varieties of cheese, some of which have obtained a great celebrity, such as the Parmesan, Stilton, Gloucester, Cheshire, &c. in Europe, and the Goshen, Orange, &c. in the United States. The different qualities of the several kinds of cheese is depending on the milk, and the different processes adopted in making the cheese, and fitting it for the market. The best cheeses always retain the cream in the curd; those made from milk deprived of the cream is called skim-milk cheese. This kind is of course less rich than the other, but may be kept longer. Cheeses made of goats milk are richer than those made of cows milk, but it is with difficulty they are kept for any time. They are, therefore, made small, and eaten as soon as they have attained perfection.—The celebrated French cheese called Rochefort cheese, is made of a mixture of goats milk and cows milk, and its peculiar excellence is supposed, in part, to be owing to the temperature of the rooms in which it is prepared, which being excavated in rock, are always of the temperature of 36° to 40°. Formerly those dairies that made the rich or cream cheeses, such as the double Gloucester, Stilton, &c. were obliged to make them small, and the dairies of this country that imitated such cheese were compelled to do the same, as their rich and tender mass would fall to pieces of itself if made of large sizes. Now the richest cream, or double cheeses, are made without difficulty, and of any desirable size, as the curd is pressed and kept in bandages made of thin cotton until ripened and used. The dairy business, when well conducted, is a source of great profit, and the American dairies in some parts of the states are exceeded by few in the world for the quantity and quality of their products; a decided improvement having taken place within a few years.

CHEMISTRY. A science which teaches the relation which matter bears to other matter, and the manner in which the laws of affinity, vitality and organization, perform their several functions. Agricultural chemistry is limited to a knowledge of the substances which enter into animals and vegetables, to serve them for nourishment; and to the study of all the agents which aid them in accomplishing these functions. Agricultural chemistry first assumed a definite form under the labors of Davy and Chaptal, and though but a comparatively few years have elapsed since the attention of chemists were directed to this object, the benefits that have already resulted are immense. It is this which has taught the analysis of soils, the nature and action of manures, and the different substances that go to make up the several parts of plants, and of course the materials that should be furnished them to forward their growth and mature their seeds. Farmers knew how to make the earth produce straw, but to fill the ears with grain was beyond their power. Chemistry came to their aid, and taught them that manures containing phosphoric salts, and those that furnish azote and gluten, are the ones that can alone tend to such a result; in other words, that the soil must have returned to it as much of these essential ingredients as cropping was taking from it, or the production of the grains would be impossible. It has been said that chemistry has not taken the lead in any measures of decisive utility to agriculture, that it has only explained results which experience had already discovered. But it should be remembered that the results which experience had obtained, gave, under ordinary circumstances, no data by which such results could be repeated. Chemistry gave the response, which was in vain elsewhere asked. She taught why certain results were in some cases obtained, while in others, to the common eye the same, gave returns totally different from those expected; and the career of agricultural chemistry, though it has already performed much, can hardly be said to be fairly commenced.

CHERRY. (*Prunus.*) There are two kinds of the cherry tree which are of considerable importance; the first, the wild or black cherry of our forests, *prunus virginiania*, is much valued for the excellence of its wood, which is used extensively for the manufacture of furniture. It is one of the most beautiful of our forest trees, throwing up a tall straight trunk from six to nine feet in circumference, some seventy or eighty feet. While the use of liquors was tolerated as fashionable, the cherries of this tree were in great demand, for the making of cherry rum, cherry cordials, &c. This kind of cherry would be more extensively planted, were it not liable to be attacked by multitudes of worms, which in open lands not unfrequently divest them of their entire foliage. The other kind of cherry is the cultivated variety, (*prunus cerasus,*) and though too little attention is paid to this tree, it is one of the most valuable of our fruit trees, easily grown, very hardy, and early in the season. Cherries are of two kinds, as cultivated in our gardens; the heart shaped, and round, varieties. Of the first, the Black and White Tartarian, Black

Heart and Elton, are the favorite kinds; of the latter the Early May, May Duke, Late Duke, and Waterloo, are highly esteemed. Cherries flourish best in a dry and rather light soil; and a heavy wet or clay soil is not only injurious to the tree, but the fruit on such trees is of an inferior quality.

Look to your Weeds.

There are few farms in the country, and pity it is that this can be said with truth, on which there are more or less weeds that do not require close attention to prevent their seeding, or otherwise spreading in the course of the summer. There is the thistle, which should be repeatedly mowed, if in pasture land, or if among hoed crops, cut with the hoe as often as it makes its appearance. There is the Johnswort, crowding out the valuable grasses, poisoning sheep, and giving horses chapped noses and legs, if they are so unlucky as to be white; be careful not to let this go to seed. There is the sweet elder, that is becoming far too common; we do not require it for distillation or to color wines, and if we allow the seeds to ripen we are preparing tribulation for ourselves and neighbors. There is the life everlasting, a worthless intruder that occupies the ground exclusively where it spreads, and that is rapidly, when it is once allowed a foothold. See that this weed is effectually demolished wherever it appears. Look on your spring sown grain, and if it is full of yellow blossoms, you will probably find that charlock is in your fields, and if it is not pulled promptly and completely, you may find business for years in attempting vainly its extirpation. The crowfoot of your meadows, or the daisy of the pastures, must be looked to, else lean cattle may be expected when fat beasts should be looked for. In short allow nothing to be in your fields that usurps the place of more valuable plants, lessens the amount of your crops, or renders your fields a place in which pests are multiplied to reduce your own profits, or vex the souls of your neighbors.

Disease of Sheep.

We are sorry to learn that some farmers have this year suffered considerable mortality among their flocks of sheep from a complaint resembling hoven or bloating in cattle, and is probably owing to the same causes that produce that disease. They are frequently found dead or nearly so, their bodies swelled or bloated excessively, and while living, evidently in great pain. Mr. Lawrence, and other writers, attribute it, and justly, to overfeeding on clover, or any other succulent food or over rich pasture, particularly the young shoots or blades of grass, in the spring, or later in the year. The present season has been remarkable for the richness or succulency of pastures; the grass having a rapid growth in most cases, and being in precisely the state calculated to produce diseases of this class. The almost continual wet or cloudy weather, has been particularly unfavorable to the health of sheep, predisposing them to colds and complaints resulting more or less from such a state of things. The symptons of blast or hoven are understood without difficulty. The sheep swell almost to suffocation, lie down with their legs stretched out, or stand scarcely able to breathe, and, unless relieved, die.

In treating sheep attacked with hoven, some farmers stab their animals in the side with a knife, as is sometimes practiced for cattle; but it is very objectionable, since it does not remove the cause of the difficulty, but at every repetition of the knife increases the danger and renders the case more doubtful. It may, however, in desperate cases, or where better means are not at hand, be adopted. The best method is to pass a prebang, made in the manner described at page 114 of the Farmer for 1838, only on a smaller scale if for sheep, down the animal's throat into the stomach, and the confined air will rush out. A drench composed of

Common salt.....one ounce
Solution of potash.....one or two tea spoonfulls
Castor or sweet oil.....two table spoonfulls
Water.....eight ounces

should be given, and the sheep moved about a little.—As soon as the bloating is relieved let the animal be removed to the barest pasture, there to remain until the digestive functions are restored. In extreme cases a clyster may be given with good effect. If the animal be much griped or in severe pain, thirty or forty drops of laudanum, or two or three tea spoon fulls of anodyne carminative tincture, added to the above dose, will aid in relieving the pain.

Continued rains, falling on retentive soils, have a tendency to keep the earth in that wet state which experience shows has a direct agency in producing that most fatal disorder of sheep, the rot; and though we have as yet been mostly exempt from complaints resembling that which prevails so extensively in Europe under that name, still, as the disease is by foreign writers considered heridetary, it is not impossible that among our numerous importations, some animals with tainted constitutions may be found, in which favorable seasons may develope the complaint so fatal abroad.

Grain Plants.

The growth of the wheat, both winter and spring wheat, barley and oat plant, this year, is on the most magnificient scale, approaching to the luxuriance of the tropics. Wheat from six to seven feet in height, not a few stalks only, but whole fields; oats which in size already resemble the cane brakes of the south, and are still towering upwards; barley on the same scale of rapid growth; in short scarcely a cultivated plant, with the exception of corn, (and this is now coming on finely) that does not exhibit the same aspiring character.—There is now, (July 22,) every prospect that the barns and the granaries of the husbandman will be filled to overflowing. The wheat crop as far north as Pennsylvania has been secured, and in good condition; and from every account, is better than a medium one. Wheat in Michigan, and some parts of Indiana, has suffered much from insects; in some districts of these states the crop will be almost a total failure. This is particularly to be regretted, as the financial condition of the West required the aid of good crops to restore prosperity, and a healthy sound state of things in that respect.

PRESERVING FRUITS.

The following method of preserving fruits was communicated to the Dublin Society, by Signor Ignacia Buonsegna, and for which he received a premium of ten guineas. It has since been found that cotton, as a preservative of grapes, is superior to paper shreds, and grapes so preserved are found good for months.

"It is necessary to pull the fruit, two or three days before the process of preserving is begun. They should not be too ripe, and care must be taken not to bruise them in the least. Spread them in a dry room, on a clean table, over which pure straw has been spread. A room, the windows of which can be opened, is to be preferred, that all the moisture on the skin of the fruit may be dried away.

Apples and pears should be gathered at least three days before using; strawberries only twenty-four hours. Tnese last should be gently taken up with a silver fork, and the stalk cut off without touching them, as the least pressure will cause them to rot. The largest and fairest fruit, and that which is not too ripe, should only be taken. Strawberries are the most difficult of fruits to preserve; but if done with care, will keep six months; there must not be more than one pound in a jar. For preserving all fruits, common earthen jars, with lids, or stoppers of the same, fitting close, will do well.

The pears and apples, sorted and perfectly dried, must be wrapped up separately in soft wrapping paper, and twist it closely about the fruit, then lay clean straw at the bottom, and a layer of fruit, then a layer of straw, and so alternately until the vessel is full; but you must not put more than a dozen in each jar; if more, their weight will bruise those at the bottom.

Peaches and apricots are best preserved wrapped in soft paper singly, and packed with fine shred paper between the fruit and between the layers. Grapes must be stored in the jar with fine shred paper, which will keep one from touching the other as much as possible. Five or six bunches only should be put in a jar, and if they are large, not so many. It is to be understood, that whenever you open a jar, you must that day use all the fruit that is in it. When fruit so preserved is exposed to the air it speedily decays.

Strawberries as well as peaches should have fine shred paper under and between them, in the place of straw, which is only to be used for apples and pears. Put in the strawberries and the paper, layer by layer; when the jar is full put on the stopper, and have it well luted round so as perfectly to exclude the air. A composition of rosin, or grafting wax, makes a good lute; let none of it get within side the jar, which is to be placed in a temperate cellar; but be sure you finish your process in the last quarter of the moon."

Fruits preserved in this way, by exclusion from the air, have a freshness when used that those kept in the common modes do not possess. It is evident the jars should be wide mouthed ones, but with wax they can easily be made impervious to air. In preserving the more delicate fruits, care must be taken not to allow any juices to escape, as it would spoil all below. Should any of our fair friends engage in the preservation of fruits in the mode recommended by Signor Buonsegna, we would advise them to pay more attention to the fineness of the weather, and the state of the fruit, than to any particular quarterings of the moon.

Salt on Insects.

Many of the best European works on Agriculture, as an argument in favor of the use of salt as applied to the soil, affirm that it will prove fatal to grubs, slugs, cutworms, and those insects that usually infest the earth about the roots of plants, causing much loss to the farmer, and this opinion has been we believe generally adopted in this country, though without sufficient investigation, perhaps to warrant such a conclusion.

Mr. Howard who conducts the agricultural department of that valuable paper, the Zanesville Gazette, in replying to the remark of the American Farmer, at Baltimore, "that salt is destructive to the whole insect tribe." gives the results of some experiments made by himself on the subject, which would seem to prove that the efficacy of salt on this point, has been altogether overrated. Mr. H. says:—"In the month of March last, we procured several worms, six of which were the large white, or 'grub' worms, as they are sometimes called; one was a 'wire worm' so called, and one a brown 'cut worm,'—and put them into a stone crock (or jar) filled with rich earth. We calculated the superfices of the earth in the crock, and then strewed salt at the rate of nine bushels per acre. After the expiration of eight or ten days, we took the crock, emptied out the earth on a board and recounted the worms. We found them all alive and 'kicking,' except the cut worm, which from its habits of crawling on the surface, had, (as we expected he would, ascended and escaped.") The others appeared to have increased in *plumpness*, and were replaced in the crock, and another salting, of the same amount as the first given then. After another week they were re-examined, when they were found in good health. They now received another dose, but the crock, was, before another examination, emptied of its contents by an individual who was ignorant of the experiment going on. Mr. Howard ascertained by experiment, that the quantity of salt put on the crock, would if applied to grass sward, totally destroy the grass plant, and the same result was produced on other vegetables with which it came in contact, and hence Mr. H. very rationally infers that a quantity of salt sufficient to destroy insects would be fatal to vegetation of any kind. That salt is not destructive to all insects, is evident from the fact that many bee keepers are in the habit of placing salt under their hives, and about them, for the use of the bees, as it saves them the trouble of seeking it in muddy and filthy places, which, as the bee is a neat and cleanly creature they are glad to avoid; and it is besides, disagreeable to the worm which is frequently deposited under the margin of the hive. We may remark, that in Europe, when employed as a dressing for crops, it is usually if not always sown upon the soil some few days before the seed is put in, by which time it undergoes a partial decomposition, and benefits instead of injuring the young plants.

How much is there in one minute, when we reflect that that one minute extends over the world!

COMMUNICATIONS.

Decandolle's Theory of Excretion.

Mr. Tucker:—It is well known to those who take an interest in such matters that Messrs. Decandolle and Macaire, have promulgated the opinion, that plants not only have excretions, but that these excretions are poisonous to plants of the same species, thus furnishing a most plausible argument in favor of the absolute necessity of a change of crops. This theory has been mentioned, and defended, by your Canadian correspondent, Mr. Colville, whose papers on vegetable physiology, I have read with no little interest and pleasure. That plants may furnish excretory matter is very probable; that it is injurious to plants of the same kind is possible; but that it is poisonous or injurious to the extent supposed by these gentlemen, if at all, I must consider as requiring further confirmation. There are one or two facts that I consider at variance with this opinion, and which I have never seen reconciled with the theory of poisonous excretions.

To test the effect of a continued succession of the same plants on soil, we must of necessity go to those places where cultivation has proceeded with the fewest interruptions, and for the longest periods. Take some of the domains of the crown or the nobility in England for an example. They have been in grass for five hundred or a thousand years; no plough has passed over them, and they are now as densely turfed, and the plants are as vigorous as if the grass was only of recent cultivation, if not indeed far more so. Now it would seem according to the theory of poisonous excretion, that these domains should have long since ceased to be capable of producing the grasses.

It may be said that the theory only refers to the cultivated crops, such as the grains that are ripened on the land, or hoed crops taken from the fields. I think it may easily be showed this position is as incorrect as the other. In the east, Palestine for instance, but a small part comparatively, is fit for grain cultivation, and all authorities, and the best informed travellers, represent these parts as continually cropped, and producing when the troubled state of these countries allows the gathering of the crops, the most surprising harvests. The great plain of Esdrelon has been cropped almost annually for three thousand years at least, and the crops of wheat and barley, even under the most barbarous system of cultivation, are still abundant. The immense magazines of grain found by the French at Tiberias, could not have been grown on such a soil as the theory under consideration would inevitably have made that of Palestine and Syria long before this time. Rotation, or change, is unknown there.

As an example of hoed crops, I might refer to the culture of onions in Weathersfield, Connecticut; where the same kind of crop has been taken from the same ground for a great number of years in succession, and with evident improvement: but I choose to give an instance which has lately come to my notice from Great Britain, where change is much less common than in this country. 'At Dunstaffnage in Argyleshire,' says the writer, 'which is a mountanious country, and naturally a barren soil, a small garden was pointed out to me, on which was growing at the time, one of the finest crops of onions I had ever seen. I took notice of it with some degree of surprise, because I had seen no other crop of onions in that district that was tolerable; but I was told that the crop on the ground was no way remarkable for that spot; that it had been cropped with onions, year after year, from time immemorial; that the present owner of the soil, who is more than 80 years of age, had never seen any other crop than onions upon the ground, and that the oldest person living in that vicinity, when he was a boy always told him the same thing, and that the crop was always a good one. Dunstaffnage was once a royal place belonging to the Kings of Scotland at an early period of their history, and there can be little doubt this garden had been under cultivation several hundred years. That it been cropped in onions more than 100 years is certain.' Now while such facts seem flatly to contradict any theory, however plausible it may appear in other respects, or however ably it may be urged, I feel obliged to hesitate before my full assent is given. These difficulties may be removed; and if so, no one would be more gratified at such a result than the writer, who considers himself truly, an

Enquirer.

A. H. Norwood's Improved Cultivator,

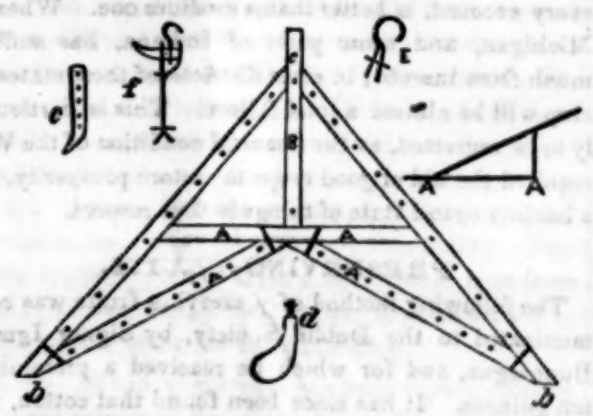
For putting in Wheat, Barley, &c. by drawing it once over the ground it completely covers the grain.

Mr. Tucker—Your correspondent is a young man who formerly followed the sea for a living; but for the last five years has devoted his time to farming—previous to that he knew nothing about agriculture. Having read a number of your agricultural papers, in which he takes a great interest, he takes the liberty of suggesting through the Genesee Farmer an improvement on the two horse cultivator, which he and others in this neighborhood have proved to be far superior to the common harrow or cultivator for getting in seed wheat, &c., as it is necessary to go over the ground only once to cover all the grain, and can be improved by enlarging it if required. The one I use has twenty five or thirty teeth, about seven or eight inches long, and a common plough coulter without any crook in it, and holes made in it to adjust it, and a clevis or hook to secure the whipple tree to it. If you think the plan worthy of your notice, it is at your disposal.

Yours, A. H. Norwood.

P. S. One span of horses is team enough to draw it.

(Fig. 34.)



A A, two handles with a cross piece to support them.

A A A A, where the handles are secured to the Cultivator.

B B the frames or beams.

C, is a Coulter with holes in it, which goes through the beam at c, and through the hold-back, with an iron pin to adjust it.

D, the form of the teeth.

E, Clevis,

F, the hold-back Coulter and Clevis, secured to the beam.

N. B. The Coulter is to be set deep enough to keep the Cultivator steady, or without, it is apt to play about. It also guards a number of the teeth from being injured by the stones.

HARVESTING WHEAT.

Mr. Tucker:—I perceive that Mr. Holbrook in his account of the farming operations of Gen. Harmon of Wheatland, states that gentleman to be in favor of cutting his wheat before the berry is hard. This is undoubtedly the best course, as numerous experiments show that while the berry is equally full and heavy in wheat cut early, the loss from shelling in harvesting is much diminished. But when grain is attacked by mildew or rust, it should be cut at once, as experience shows that when the wheat is struck with the mildew the grain becomes no better by standing, and the straw becomes rapidly worse. Wheat if cut too early requires too long exposure to dry, before it is fit for the stack or mow, which is the only serious objection to early cutting that can be made. The proper course then would seem to be to cut so early as to have both straw and berry, bright and good, and not so late as to have the straw useless, and the crop diminished by shelling.—Wheat, like corn, will do to cut earlier than most farmers imagine, without serious injury to the crop; and though extremes are to be avoided, I am convinced that in most cases farmers err by allowing their grain to stand longer than is required. It is maintained in the English publications, that the very best flour can only be made from wheat cut while the berry can be indented without difficulty. Circumstances may render a few days difference in the harvesting a wheat crop, of great importance to the farmer, and if he can extend the period in which cutting is admissible, much will be gained. In any event the subject is worthy the attention of every

Wheat Grower.

Cutting up Corn—Inquiry.

Mr. Tucker—Having heard it recommended to cut corn up by the roots as being good economy in a scarce time of hay, I wish to inquire through the columns of the Monthly Farmer, whether the experiment of cutting and feeding in a raw state has been sufficiently tested to recommend the practice as beneficial to the community. The prospect of the hay crop this season is quite dark, but corn looks quite promising. Now, sir, my object in making these statements is to solicit information. Green's Patent Straw Cutters can be obtained in this section for $25,00. Hay will probably be worth from $8 to $10. Under these circumstances, will it be good economy to take the extra trouble to gather the corn fodder and pay $25,00 for a machine to cut them, or to let the cattle take them in the field the beginning of winter? An answer to the above inquiry will oblige

A Subscriber.

Devonshire Cattle.

Mr. Tucker—It is with pleasure I announce to my fellow farmers the arrival of some of the pure improved North Devon stock. Mr. Vernon (of Roanoke, 5 miles south of the village of Leroy, on Allen's Creek) has imported this season, a bull and two heifers, (yearlings) from the stock of Mr. Davy, one of the most celebrated breeders of the pure North Devons in Devonshire, England. The animals are very beautiful and sufficiently large for profit, and a valuable acquisition to Western New York, for which we are much indebted to Mr. Vernon.

I consider the Devons better adapted to the wants and habits of the farmers in Western New York, than any other of the improved stock, not excepting the improved Short Horned Durhams. The want of size in the Devons is more the fault of the breeders than the breed, for animals soon adapt themselves to the quality and quantity of food they have to live on.

They are excellent feeders, and the beef is of the best quality, *being well mixed*. They are fair milkers, and yield a great proportion of butter and cheese to the quantity of milk. They are very active, tough and hardy—excellent travelers, and first best for labor. But permit me here to add, that we farmers must learn to take better care of our animals before we can receive much benefit from improved stock. If we cannot supply them with a sufficiency of *nutritive* food, and shelter them from the inclemency of the weather, it is of very little consequence what the breed may be—they are all unprofitable.

I fear that our lovers of good stock, (who do take good care of them,) sometimes err in placing too much value on *pedigree* and *blood*. They are necessary to give us the advantage of past experience, but they must be used with great care and prudence if we retain the improvement, for all animals of the same stock are not equally good breeders, and if they are indiscriminately kept as such, the stock will soon degenerate.

The most efficient means of improving our domestic animals would be the introduction of agricultural exhibitions. By comparing each other's stock, we should become competent judges, see their defects, find the means of correcting them, and receive a powerful stimulant to improvement.

William Garbutt.

Wheatland, July 19, 1838.

The Field Mouse.

Mr. Tucker—Deeply as we are indebted to you, for your continued exertions to promote the cause of agriculture in general, and particularly for the valuable information you have from time to time communicated through the medium of your highly useful paper, on the nature, habits, and most likely means of checking the ravages of destructive insects, there is yet one species of vermin on which I do not remember to have seen you treat, and which is (at least to us in this quarter) more formidable than all the rest; I mean the common meadow or field mouse. This is a creature, I presume, known to every one; and need scarcely require a particular description. When full grown the body may measure about three inches and a half in length, of a dark lead color, approaching almost to black, with a slight tinge of red on the back and sides; the tail about an inch in length; the ears short and open; the head short and thick; the eyes small and partly concealed with hair. They frequent all kinds of land, and seem to feed promiscuously on every thing vegetable, from the coarsest grass to the most delicate production of the garden, and even on the bark of trees; but the place where they commit the most serious havoc is in the wheat field. As soon as the milky juice of the berry begins to harden, they commence work; if the wheat is stout, and not lodged, they find themselves unable to reach it, but instinct soon teaches them to remedy this difficulty; they cut off the stalk close to the ground, which then falls or lodges against the rest of the wheat, and is of course not much nearer their grasp than it was at first; not to be discouraged, they gnaw piece after piece from the bottom of the stalk, always pulling it down every time till at length they finally reach their desired object, a process which sufficiently accounts for the little bundles of cut straw which we see every where in the bottom of the wheat at harvesting. Perhaps some people may be inclined to treat this subject as chimerical; but I have no hesitation in affirming, that some years in this section we suffer a loss of almost a third of our whole crop in the manner described. The summer of 1836 was remarkable for their numbers and the destruction committed by them; the two following summers of '37 and 38, they were comparatively few; and this year, just now while I write, they are at it as bad as ever; whether in the older cleared districts, where the stumps are all gone, which afford them shelter, they ever apear in such numbers, I have not at present the means of knowing. I have observed, however, that wherever there is growing timber in the vicinity of the grain, they are always most destructive. Is this a scourge which we are doomed to suffer hopelessly, or can you, or any of your correspondents, suggest any possible means which would in any degree either lessen their numbers, or scare them from our grain? If such a thing is, or can be discovered, it would be worthy of the best place in the Genesee Farmer, and would confer a lasting benefit on your numerous readers, and sincerely oblige, Yours &c.

Freedom, July 15. An old Scotchman.

OXEN versus HORSES.

Mr. Tucker—There are different opinions among the farmers in this vicinity, respecting the expense of keeping a yoke of oxen, and a span of horses. Having used oxen from my youth, up to the present time, I know pretty well what the expense is, of keeping them during one year. A yoke of oxen will not perform more than half the labor that a good team of horses will, and the expense of keeping a span of horses is but a trifle more than that of keeping oxen. No team can labor without being pretty well taken care of. I will admit horses cost something more than oxen, but a team of good horses, will perform enough more in the course of a year, to pay for all the difference that there would probably be in keeping.

If a farmer has nothing but an ox team to put in his spring crops, and it should be excessively warm, (which it very often is, in the spring,) it would be very late before he would get his seeds into the ground. Farmers who are obliged to have hired labor through the summer season, would do much better to have horses for their teams than oxen; that is, if they desired to get the worth of the money they have to pay for the labor of their hired men. In a hot summer's day, if a man were sent into the field, for the purpose of ploughing with an ox team, I would warrant you the man would do but very little.

Oxen are very good in their places; for instance, take a yoke of oxen into a new fallow (for the purpose of drawing logs,) and they are far better than horses; and there are many other kinds of work on a farm for which oxen are preferable to horses—for ploughing, by all means give me a good span of horses. No farmer ought to be without oxen, upon his farm, but, in my opinion, they never ought to be put in a plough, when horses are so much better. For repairing fences, carting manure, stone, rails, &c., oxen are preferable to horses; but they are poor animals for the farmer, in any other employment on his farm. Whether any of my brother farmers will agree to the above, I know not. If any should not, I hope they will express their opinion through the columns of the Genesee Farmer.

W. S. T.

South Venice, Cayuga Co. N. Y., April 24, 1838.

Libraries for Farmers.

Mr. Tucker—In Mr. Holbrook's flattering account of Wheatland and its vicinity, published in the July No. of the Monthly Farmer, he omitted mentioning one circumstance which appears to me to have contributed much towards producing the present active, intelligent, and enterprising habits of its citizens, and the productiveness of the soil, viz. the influence of useful books.

There are in the town, three good Public Libraries, containing about 2000 volumes of well selected books; and one of them has been in successful operation for 34 years.

It is worthy of the consideration of the philanthropist and statesman, how far these Libraries have been influential in producing the present state of things there.

I visited that section 24 years ago. It was then poor Oak Barrens of very little value, many of the Wheat fields not averaging over 8 bushels per acre, and cultivated grasses not grown at all, but now the productiveness of the soil is really astonishing. It is admitted that Clover and Plaster have been the means of this great change in the productiveness of the soil; but Clover and Plaster must have been applied and directed by intelligence, or they could not have produced such wonderful effects.

The late Law of the State of New York, requiring the establishing of a School Library in each School District, is a very valuable one, but its useful effects will be lost unless maturer age can also be supplied with the means of useful instruction. Active enterprise is always directed by intelligence; an illiterate community are never enterprising or even industrious (unless directed by others;) if so, how very essential is it to multiply and extend the means of instruction by establishing useful Libraries *accessible to all*, and there is not a town nor a neighborhood in the State, but what has the means of doing so if they wished. Yours most sincerely,

A Traveler.

Heaves in Horses—Inquiry.

Mr. Editor:—I have a good young horse, which I lent something more than a year ago, and by ill treatment occasioned the heaves, which materially lessens his value. It is the first one I ever owned which had it: I should be glad to learn a cure. H. Seely.

To Preserve Eggs.

Apply with a brush a solution of gum Arabic to the shells, or immerse the eggs therein; let them dry, and afterwards pack them in dry charcoal dust. This prevents their being affected by any change of temperature.—*Maine Farmer.*

Management of Horses.

Desultory Observations on Breeding, Breakig and Managing Horses and Treating some of their Diseases.

To the Editor of the Franklin Farmer:—I have often thought that the horse was much neglected here, in comparison with any other stock. I do not speak of the race horse, which is not, in my opinion, of any use to agriculturists or farmers; but as being only the means of gratifying the national taste, rather more innocent or agreeable than the *Bull fights of Spain.* About forty years ago, horses were generally handsomer and better in Kentucky, than they are now; but as soon as our attention was turned to raising mules, the horse was neglected. In Europe, horses were divided into three classes—the draught or work horse, including the carriage horse, the horse of burden, and the riding horse or poney. Draught or work horses must be of a strong make, taller than the others, and yet be active and supple in their movements—his height 15 or 16 hands.—The horse of burden must be smaller, say 13 or 14 hands, and is preferred by many for his superior strength.—The riding or saddle horse must be slender and elegant in all his limbs and may be within 15 hands. It would be advantageous for every rich farmer to own a stud horse for his sole use, and of a strong breed of the draught and riding classes combined. If among his colts there should be a racer, as it might happen, he would be sold as such and would be an extra profit without any risk. The stallion thus kept for the farm, and therefore limited to a certain number of mares, would have a hardy and strong progeny, far superior to the weak offspring of a worn out sire. The animal himself would preserve his strength a long time unimpaired and even be worked with great advantage to his owner. The extreme plurality of mares, bred to one horse, is one of the causes of the degeneracy of horses.

The choice of mares is still more important than that of the horse; for many colts resemble their dams more than their sires; and this is another cause of degeneracy. The education of horses, like that of men, begins during their infancy. The care that is given to the mare naturally enables a person to touch and caress the colt itself, which loses its shyness and becomes gentle and easy to break to his future labor. But although he may be broke even at two years old, he should never be rode or worked until he is full three; the too early riding or working a horse being a most pernicious practice and cause of degeneracy. To break a horse, is too often an excuse for breaking his bones; but means nothing more than using the most proper means to render him useful. At two years old he may be made to walk the ring by means of a long leather line in a circle. After having been thus practiced in walking, give a length of line and use him to trot, taking care that his hind feet do not touch and cut his fore feet. All this may be done gently and if a blow seems to be necessary, let it be with a whip, more in terror than effect and after the voice has failed to procure obedience.—This may be practiced two or three times weekly. When the colt begins to understand what is wanted of him, then put a blanket on him with a girth during his exercise, then a light weight, increasing in proportion to time and strength or as he will be wanted as a beast of burden. When two and a half years old, a boy may mount the colt, while he is walking the ring, but not as yet at large. When he has acquired a good trotting gait, take a longer line; and two persons are needed to learn him to gallop and leap over a loose pole, low at first and raised higher by degrees. The work or draught horse need not practice leaping; instead of which, he must be taught the harness and to pull light burdens, with small wheels, so as to accustom the colt to draw and to the noise; this last to be increased by degrees, so as not to scare him and moreover to use him not to be frightened at any noise in future. All this practising may last until the horse is at least three years old, at which age the back bone is strong enough not to be curved inwards by the rider or weakened by overstraining in pulling.

Town horses in Europe are always kept in the stable, fresh litter being spread every night for his bed and taken away in the morning. He is fed with hay, straw and oats; the hay and straw are in bundles, the hay of 20 or 25 lbs., the straw about 10 lbs. Rye straw is preferred. Both are put in the rack. Wet bran sometimes is mixed with oats. Perfect cleanliness is kept in the stable, the horse is curried, brushed and combed every day and taken to the river at least twice a week if possible to wash and bathe. In the country, horses are often fed with chopped rye straw, rye and barley meal. In France, the hay is made of different kinds of grasses unknown here, some of which contains more saccharine and nutritive matter than most of ours.—Lately the potatoe has been tried and boiled for horses, perhaps in time of scarcity of grain. In England, carrots, Windsor beans, cakes of beets and other vegetables have been given to them; the potatoe seems to

have succeeded well There is however, a difference of taste in animals, as in men, in this country; we can scarcely prevail upon them to eat any of those articles of food so much praised in Europe, such as turnips, ruta baga, pea pods, which are eaten greedily any where else. A work horse kept generally on dry hay, will be stronger and fitter for hard labor, than a horse fed on green grass; and it is only when his system wants cooling, that he ought to be sent to pasture; and it would be more advantageous to farmers if their work horses were never put to pasture but kept in a large stable yard and go in and out of the stable to eat.

It is an error to suppose that the horses ought to brave the rigors of all the seasons, as they do in their savage state; in this, man or beast follows the dictate of nature and are not obliged to work. Civilization has changed or altered their constitution.

The mare at least must be taken from pasture some time before foaling, for assistance is often necessary to the colt in the first days after birth, being subject to a sort of dysentery besides that which is particularly called the colt distemper. The symptoms of it are a dulness of motion; a cough after some days; the swelling of the kernel under the jaws, and lastly a running at the nose. The first remedy is bleeding. When there is a considerable discharge at the nose, fumigation is proper; make a bag of about 2½ feet long and large enough to admit half the head, with a string over the ears. Boil mullein and bran together, put them into the bag tolerably hot, so that the steam should penetrate into the mouth and nose of the animal and disengage all the matter. The water of this may be given him to drink with a little salt. Hay and bran must be his food. An abscess is sometimes formed in the kernel, for which an ointment of two yolks of eggs, mixed with turpentine, may be used to rub the part and even fastened there as a plaster. The horse must be purged at the end of the treatment.

I shall add one more observation, grounded on my own experience. I had a very good and handsome horse whose stable was near a hog's pen. He began to cough so as to make me think that he might have swallowed some feathers of the hens that perched in the hay loft. Not suspecting any other cause, I was sometime at a loss to find it out, when one day going into the stable, I was struck with the bad smell of the hog's pen, and conjecturing that to be the cause, I removed the hog pen and saw with great pleasure that my horse recovered from a cough that threatened his life.

When a horse is sick in winter, he must be covered, but not in summer except he should be cold. Every humane and reflecting person must rejoice at the leaving off the fashion of cutting off the horses tail. It is clear that nature produces nothing in vain. The tail may be trimmed; but never forget that a horse, harrassed by flies, has no other means than his tail, to brush them off and that it may prevent accidents, in keeping him to stand quiet.

A purge for a horse after distemper—the 8th part of one ounce to the 10th of *Aloe Barbadoes*, dissolved in warm water. WALDEWARD MENTELLE.

From the Farmer's Monthly Visitor.

Preparation of Sward Lands.

Hon. ISAAC HILL:—Sir,—I have tried some experiments in preparing sward lands for tillage. My land is generally a stiff clay loam. When it has become exhausted so as to bear a grass crop but little more than worth cutting, and I have no manure to put on it, I plough it the last of June or the first of July, and am particular to plough deep and turn it over entirely.

I then sow it with oats, clover, &c., and harrow it lightly lengthwise the furrow, that the sod may be disturbed as little as possible.

In September, I plough it lightly and turn in the oats, &c. The next spring the land is almost as pliable and easy to cultivate as an old field, and it is suitable for almost any crop. It should be manured highly this season; and the next it may be seeded down to grass, if desired.

If one has manure suffiicient, it may be ploughed abou the tenth of June, and sown with ruta baga, which wil richly repay the expenses of cultivation.

Grass lands should be ploughed early in the fall or late in the spring, in order that the vegetable matter turned in, may be in as great perfection as possible, and also that there may be sufficient heat in the soil to produce fermentation.

This of course is not intended as a substitute for rotation of crops; but most farmers, I presume, have lands in the same situation, and before they can commence with a regular rotation, something like the above plan may be advantageous. J. K. SMITH.

June, 1839.

COTTON.—There are reports that the cotton crop of Texas will be four times as great as that of last year.—[Boston Cultivator.]

The GREAT business of our Country is Agriculture,

1. Because it feeds us, and furnishes the materials for our clothing:

2. Because it gives useful employment to five-sixths of our population:

3. Because it is the primary source of our individual and national wealth:

4. Because it is the nursing mother of our manufactures and commerce—neither could prosper or long exist, without it:

5. Because it is essential to national independence.

And hence it follows, as a corollary, and an implied duty, that we should give to this great branch of national industry, all the light, stimulus and reward which its importance demands.

We possess no statistical data of sufficient extent and accuracy to determine the amount of capital invested in our agriculture, the value of its products, the aggregate of its profits, and its consequent relative importance; yet we can form a tolerable estimate in these matters, by an examination of the agricultural statistics of Great Britain, which are furnished to our hand, and by then comparing her condition with our own. The following facts are gathered from a letter of James M'Queen addressed to Lord Melbourne, on the subject of the corn laws.

AGRICULTURAL PROPERTY.

Great Britain and Ireland.	Rental.	Value at 30 years purchase.
Land,	£63,395,684	£1,901,870,520
Residencies, proprietors, &c.	5,000,000	150,000,000
Timber, produce yearly,	3,000,000	90,000,000
Land tax, 1834,	1,203,578	34,107,340
Yearly value of tithes,	4,841,053	145,231,590
Poor rates, perpetual charge, exclusive of rent,	5,434,890	163,046,700
Mines, minerals, & fisheries,	3,994,031	119,820,930
Property of proprietors,	£85,665,658	£2,604,077,080

PRODUCE OF BRITISH AGRICULTURE.

Grain of all sorts,	£134,000,000
Potatoes,	20,000,000
Hay, grasses, turneps, straw,	120,300,000
Natural pasture,	63,502,000
Butchers' meat, pigs, poultry, game, rabbits, &c.	82,283,750
Fisheries, food from,	12,000,000
Products of the dairy, vegetables & fruits,	48,500,000
Allowed for consumption by farmers in some articles not enumerated,	2,500,000
Wool, hops, seeds, flax, hemp and timber,	21,479,166
Mines, minerals, coals, &c.	33,970,276
Total produce of agriculture,	£539,036,201

Equal to about $2,000,000,000.

There are employed in these branches of productive labor, which the writer has classed all under agriculture, eighten thousand families, which, at five and a half persons to each family, gives about ten millions of persons, or five million five hundred thousand effective men and women.

SUMMARY OF POWER EMPLOYED IN AGRICULTURE.

Direct human power, men and women,	5,540,000
Horses, 1,609,176, each equal to 6 men,	9,655,068
Oxen, 500,000, each equal to 5 men,	2,500,000
Total effective power direct,	17,665,000

CHARGES ON AGRICULTURE.

On fixed capital, lands, tithes, land tax, mines, fisheries, farm stock, &c.	£162,993,468
Farm wages, cattle feed, &c.	289,838,628
Tithes, church and highway rates, and labors in mines and fisheries,	42,228,748
Carried forward,	£432,060,844
Brought forward,	£432,060,844
Manures, bone dust, lime, wastage and replacing live stock, dead stock, &c.	116,915,280
Charges on agriculture,	£548,976,104
Deduct dead stock,	21,560,000
Total charges on agriculture,	£527,416,104

SUMMARY—AGRICULTURE.

Total produce,	£539,036,201
Total charges, rent at 3 per cent,	527,416,104
Farmers apparent profit,	£11,620,097

The poor rates are paid as follows:

Property in land, and tax on houses and occupiers,	£8,099,414
All other classes of property,	7,226,406
Total,	£15,325,720
Deduct charges and allowances,	780,000
Nett produce,	£14,545,580

MANUFACTURES.

The capital vested in, and charges on, the manufactures of the United Kingdom, are stated to amount in the aggregate, to	£115,773,879
And their total produce per annum, to	259,412,702

The total number of persons engaged in manufactures is stated at 8,200,000, one half of which are effective men. These added to the steam power employed, give an aggregate power equal to 4,500,000 effective men. With the addition that has recently been made to manufactures, the writer states the comparison as below.

	Capital.	*Produce.*
Agriculture,	£3,258,910,810	£339,036,201
Manufactures,	217,773,872	271,416,709

or 15 to 1 in capital, and double in produce, with this further superiority, that in the agricultural capital it is all fixed and real. Agriculture expends nothing abroad while manufactures pay to foreigners £20,000,000 annually for raw materials.

COMMERCE.

The total exports for 1838, amounted,

To foreign countries, to	£37,833,000
To her colonies, to	15,532,566
	£53,368,566

Of these £12,425,605 (about $54,000,000,) were to the United States, for which she received principally our public stocks in payment.

It appears from the preceding data, that the capital invested in British agriculture is fifteen times as great as that which is invested in British manufactures, although the latter excel in magnitude the manufactures, of any other nation; that British agriculture pays most of the burthens of the government, supports a privileged clergy, and contributes more than thirty millions of dollars annually to her poor rates;—that its products exceed in value, *more than fourteen times* the whole amount of her exports to foreign countries, although her commerce exceeds in that of any other nation;—and that her agricultural capital is fixed, and abiding as her islands, while the capital vested in her commerce and manufactures is subject to many contingencies, which may impair or destroy it.

Now let us apply these facts to our own condition. We will assume the population of both countries to be the same. Ten millions or one-half of her population are assigned to agriculture. With the collateral branches, as mines, fisheries, &c. which are classed under agriculture by Mr. McQueen, fifteen millions of our population may be assigned to this class. And the presumption is, that our agricultural capital and agricultural products, overbalance the capital and products of manufactures and commerce, as much, nay more, than they do in Great Britain. From this view of the subject, it will be seen, that agriculture is really the GREAT business of this nation; that it is worthy of the most liberal patronage of our governments, state and national; that it ought to be enlightened, by a better education to the agricultural class; that it ought to be encouraged and patronized, by public bounties and rewards; that it ought to be respected, for its highly salutary influence upon our republican institutions, and upon the good order of society; and finally, that it ought to be honored, at least according to its intrinsic merits, that it may be more followed, by men who have minds, as well as hands, to accelerate its improvement.

We mean no disrespect, by these remarks, to the merchant or the manufacturer. We are not in the way of believing, that by attempting to raise one class, we sink the other classes. Manufactures and commerce are the hands and the legs, while agriculture is the body. They are reciprocally useful to each other. The body may sustain life without the limbs, but the limbs, will perish without the aliment which they derive from the body. But we believe the other classes have numerous and efficient advocates, who are able to take care, and who do take care of their interests; and that agriculture demeans herself, and compromits the best interests of the State, by her modest, passive, degrading acquiescence in total neglect. We wish to raise the agriculturists of our country to the condition which belongs to them—to that of intelligent, prosperous, high principled men—who know their rights and their duties, and will fearlessly assert the one and faithfully perform the other. Then will our agriculture be made to double and treble its products—to compete with the agriculture of other countries, and to supply all our wants; then will party interest be made to bend to the public good, and riot and outrage be made to give place to law and good o der; then shall we truly become an independent nation, rich in all the elements of human happiness. Even if we fail in all these fond anticipations, we can lose nothing by making the effort. We must be gainers in a less or greater degree.—*Cultivator.*

From the Philadelphia Farmer's Cabinet.

Apple Orchards.

I have observed that the generality of orchards decline in about twenty-five or thirty years. This is owing to many causes. First, the sowing of oats, which seldom fails to kill the trees; it ought never to be done; again, in about the time specified, the tree has exhausted the land, which is too poor to support it. I would recommend the following plan—the benefit I have proved. Grub round the trees and take the mould and grass away; then manure them; take off the old scruffy bark—a spade is a good implement for this. Then let your hands take a stick about two feet long (the end in each hand) and rub briskly up and down; this will in a small degree, loosen the bark, and give room for the sap to flow freely. After this you may put round the trees say the second year, corn cobs; those from your hog pen are best. Cut off the sprouts but no large limbs.

A SUBSCRIBER.

The Properties and use of Soil and Subsoil.

Although it has been shewn that there is an intimate connection between the nature and properties of the soil and those of the subsoil upon which it rests; yet we would wish it to be understood that the nature and quality of the materials of which the soil is composed, has not so much to do with its productiveness, as the mere mechanical mixture of its parts, by which it is brought into such a state of friability as to enable it to retain moisture in dry seasons, and give of by filtration its redundant moisture during a continuance of wet weather. When soils are not naturally in such a state of friability, they might be made so artificially by a proper admixture of clay, if too light or sandy; and by an admixture of sandy matter, when too strong and adhesive.

Silicious sandy soils soon decompose the manure bestowed upon them, which is carried off by water and evaporation.

These are called hungry soils.

Soils on a dry porous subsoil are more easily dried by evaporation than when the subsoil is clay or marl.

A dry, light, sandy soil on a clay subsoil, is more productive than on a sandy, gravelly subsoil, and it also supplies the means of its permanent improvement by mixing some of the subsoil with the soil.

"The best constituted soil is that in which the earthy materials, the moisture, and manure are properly associated, and on which the decomposable vegetable or animal matter does not exceed one-fourth of the weight of the earthy constituents."

Putrefaction goes on very slowly in strong adhesive clays, while in sand and gravel the process is very rapid; In quick lime, it is more so than in sand, but carbonate of lime or effete lime retards the process of putrefaction more than sand or clay. All earths have an affinity for, or the power of, retaining the gas or effluvia from the fermentation of animal and vegetable matter which takes place on or near their surface.

None of the primitive earths, when pure or unmixed with others, are capable of supporting vegetable life; they are neither convertible into the elements of plants nor into any new substance by any process naturally taking place in the soil. When they are component parts of the soil, they merely act as mechanical agents for the support of the plant, and prepare a bed in which the roots sink and extend themselves for the purpose of fixing their position, thus forming a natural laboratory in which the decomposition of organic matter is carried on, and where it is reduced to its original elements for the reproducing of plants.

A soil that is formed of nearly equal parts of the three primitive earths, namely, sand, clay, and lime, with a mixture of decomposing vegetable and animal matter, imbibes moisture from, and gives it out to the atmosphere, and has all the principles of fertility which give life and vigor to the plants that grow in it.

The properties of a good soil should be so friable and porous as to permit the roots of plants to strike freely in every direction in search of nourishment, and to allow the superflous water readily to pass off through the subsoil, but to be sufficiently tenacious to retain moisture for the support of plants when in full vigor.

Fertile soils must be composed of silicious sand, clay, and calcareous matter. "The proportion," Kirwan says, "where rain to the depth of twenty-six inches falls per annum, is fifty-six per cent. of sand, fourteen of clay and thirty of calcareous matter." But these proportions depend entirely on the climate, the situation, the nature of the subsoil, and other local circumstances. More silicious sand is required in proportion as these circumstances tend to make the soil wet; and more clay, if they tend to make it dry.

The constituent parts of a fertile soil should bear a certain relative proportion to each other; but if any of these prevail or fall short to a certain degree, the soil becomes less productive.

The proper proportion of the primitive earths to form a productive soil under these circumstances may vary from 50 to 70 per cent., of silicious matter; from 20 to 40 of clay or aluminous matters and from 10 to 20 of calcareous matter.

According as the climate is moist, the soil should be friable and porous; according as it is dry, the soil should be adhesive and retentive.

The most productive soil is that which is so constituted as to maintain such a degree of moisture in very dry, and in very wet seasons, only to give a healthy supply of it to the plants. Such a soil gives to plants the means of fixing their roots deep to support them during the period of their growth, and allows them to ramify in every direction in search of nourishment where they may easily abstract the elements of vegetable life without being injured by a redundant or a deficient supply of moisture, during any period of their growth. A constant supply of air and water is necessary to make and keep the soil permanently productive; when the soil is easily made and kept friable, it will also have the power of absorbing, retaining, and decomposing the water, the air, and the organic matter, which may be in its composition, by insensible fermentation; and give up a constant supply of the results of this decomposition for the growth of plants, either at seed time, when they are merely vegetating,—in summer, when they are growing with the greatest luxuriance,—and in autumn when they are ripening their seeds for harvest. *Morton on Soils.*

A hint in Housewifery.

In summer and autumn your soap-grease is apt to accumulate beyond your immediate wants; if put away it is apt to be devoured by maggots, and if made into soap, you may not have pine or other appropriate vessels enough to hold it. Having suffered loss from being placed in such circumstances we were much gratified with a piece of intelligence accidently received, which releived us from the disagreeable dilemma. By the boiling your soap with salt, about a quart of the latter to three gallons of the former, you can separate lye and water enough to make the soap hard. After boiling half an hour, turn it out into a tub to cool. Cut the cake which swims on the top into pieces, and having scraped off froth and other impurities, melt again, (without the lye and water underneath, of course,) and pour into a box to cool. You may then cut it up into bars of proper dimensions for drying. By adding a proportion of resin, well pulverised, at the last boiling, you will have yellow soap like that made for market.

Families moving to the 'Far West' or elsewhere, would find it more advantageous to make their soap fit for carriage in this way, than to give it away, or sell it for next to nothing.—*Farmer's Monthly Visitor.*

From the New England Farmer.

HAYING.

This great operation is now going on in earnest in this part of the country. In the interior it is postponed to a much later period. The proper time of cutting hay is a matter upon which, among the best farmers, a diversity of opinion and practice prevails. The clovers, it is believed, should be cut when the flowers first begin to fade. The fine grasses on the alluvial lands of Connecticut river, known there generally under the name of the English Bent, require to be cut quite early, or the hay is hard and wiry and not relished by cattle. In respect to herds grass or timothy it is a debateable point, whether it should be cut in the flower or when the seed is formed and almost ripened. The greener the hay, provided it is sweet, the better it always sells in the market. The nearer it approaches to ripeness, the more nutritive matter is contained in it according to the analytical experiments of Sinclair upon various grasses, as given in the tables published. How far these tables are to be relied upon as demonstrative of the actual truth in the case, remains to be seen. Many persons are of opinion that the decision of a jury of cattle upon the subject would be much more satisfactory and conclusive. We wish some experiments could be made by which this matter should be brought to the test. We are not prepared to say exactly how these experiments should be made; but a reflecting and observing farmer, disposed to test the matter, might easily come to a satisfactory solution.

Sundry modes have been suggested for the curing of clover hay. No grass suffers greater deterioration from excessive drying and much tossing about. Two of the best farmers in the state, in Middlesex county, say, their practice is, after cutting clover, not to spread but simply to turn the swath; and in the afternoon of the day on which it is cut, put it carefully into cock, and let it remain in cock until it is sufficiently made to be carried into the barn. When this is to be done, they merely turn the cocks over, so that any moisture which may be at the bottom of them may be dried off. They say in this way their hay comes out perfectly bright and sweet; and they value it more than any other as feed for their milch cows. We know the general management and improvement of their farms are not excelled by any in the state. A very intelligent farmer in the interior of New-York, has stated to us that he practises on the same plan, and with perfect success. We know of others who have experimented in the same way, and have failed. So it is with almost every thing in life. Some men succeed while others in the same circumstances are sure to fail. If any succeed in the case, then it is certain that the cause of failure must be in ignorance or neglect of the proper method of management. The thing is of much importance; for, in general, clover hay as it is commonly cured is of little value and fit for not much else than litter.

The importance of a free ventilation in barns is not always enough considered. In the report of the Agriculture of Berkshire, under the account of the Shakers' Establishments, the construction in the barn at Hancock, with a view expressly to this object, is particularly described, and at least suggests some useful hints on this subject. In some parts of the north of Europe the mode of curing hay is thus described. The hay is put up quite green in stacks. It is raised on staddles or beams sufficiently high from the ground to admit a free circulation of air underneath the stack. A sort of chimney is formed in the middle of the stack as it goes up, either by building round a barrel or a bag filled with hay, which is drawn up by degrees as the stack rises; and thus a continual circulation of air is kept up through the stack, while the hay is drying; and the vapor arising from the heating and drying of the hay passes off by this chimney. In such case they have a thatched covering over the stack, resting upon four poles, which is often seen among the Dutch farmers in our own country. We know nothing of this mode of curing hay, but from the accounts thus given. The hay, as it is represented, is perfectly cured in this way. The account has certainly sufficient plausibility to demand a trial on a small scale. H. C.

Sugar Beet for Milch Cows.

An intelligent gentlemen from the eastward, assured us a few days ago, that by giving his cows a peck of sugar beets twice a day, cut up with their hay, he was enabled to get just as rich milk and butter during the winter as in summer, when the pasture was at its best. Now, as an acre of ground well manured, planted in this root well attended, would yield beets enough to keep *ten cows* from the first of November till the first of May, should not every farmer make his arrangements for planting beets next spring? From our own experience, we have no doubt, that this addition of beets to the ordinary feed of the cows, would make a weekly difference of 2 lbs. each in their product of butter.—From the first of November to the first of May, there are 26 weeks. This number of weeks at 2 lbs. additional butter, would give us 52 lbs. for each cow during the period named, or 520 lbs. for the 10 cows, and if we set down the butter as being worth 25 cents per pound, it will give us 130 dollars as the value of additional yield brought about by the feeding with the product of an acre in beets. But this is not all—the proprietor of the cows in the spring, would have the gratification to know that he had treated his animals well, and the satisfaction of seeing them in good condition.—*Far. & Gar.*

Soil for the Sugar Beet.

A deep rich loam is best; but any soil that can be made mellow, will answer well. A very dry soil does not yield so large beets, but sweet and nutritious ones. The soil should be free from stones, and well pulverized to a good depth, that the root may pierce it freely and grow smooth and handsome. Plant in rows 24 or 30 inches apart, and leave the beets ten inches from each other in the rows. The ground should be thoroughly prepared and well manured.

Calculation--Management.

On passing by a hay field the other day, we stopped to see the calculation of a couple of hired men who, with the aid of a boy, were attempting to load a cart with hay. They drove the cart midway between the two winrows which were more than twenty feet apart. One man was mounted on the cart, one used a pitchfork. This man was obliged to carry every forkful not less than eight feet to reach the cart, and when he had pitched a while on one side he was obliged to move round to the other for the hay of the other winrow. These movements gave opportunity to the man on the cart to stand still one half his time and more. But to balance this the boy who was raking after the cart had twice as much labor before him as he could perform, for the cart was so distant from each winrow that the scatterings were strown nearly over the whole ground.

The boy fell in the rear, and the farther the team advanced the more hopeless was the case of the boy, for he was getting farther off from the place of deposite for his scatterings. We could not but inquire of the men why they did not drive close by one winrow—then close by the other; in which case they would make but little scattering for the boy and would leave the man on the load no leisure to look up and see how high the sun was.

The pitchfork man asked us with a smile if we thought we could pitch better. We took the fork from his yielding hand—hawed the team close to the winrow, tossed on the hay in small forksful, "many and not far between," so as to allow the man on the load no leisure to be calling on the boy behind "to spring to." When this winrow was finished we turned about and drove close to the next—beginning to pitch from the head of the cattle and going back each time so as to meet the boy at the tail of the cart with his scatterings, instead of keeping him constantly at a distance from the cart. We thus met him every time before we started the team.

Before we had finished loading, the owner came into the field and he was so much pleased with our management he said we might put down his name for our paper for one year, though he already took four papers, and more by half than he could read.—[Boston Cultivator.]

Observations on the Culture of the Strawberry.

By A. J. Downing, *Botanic Garden and Nurseries, Newburg, N. Y.*

The strawberry is certainly one of the most valuable and delicious of all the smaller fruits. It is not only easily cultivated, yielding an abundant crop in a short time, from a very limited space of ground; but while its pleasant sub-acid flavor is agreeable to all palates, and forms one of the most delightful additions to the dessert in summer, it is also extremely wholesome, never, as is the case with most other fruits, undergoing the acetous fermentation. In some diseases it has ever been found highly beneficial, and it is affirmed that Linnæus was cured of the gout by abundant use of the berries.

The strawberry, though a low herbaceous plant, sends down remarkably strong roots. In good soils these are often found to penetrate to the depth of eighteen inches or more in a season. It is necessary, therefore, to produce a fine bed, that the soil be deep as well as rich.—Where the sub-soil is not positively bad, the ground is always much improved by trenching, (two spades deep,) before setting the plants. In doing this a good coat of manure should be deposited between the two spits: old garden soils which have been long cultivated are astonishingly improved by this practice, the whole becoming renewed by the presence of the fresh soil; and the growth of plants in such mould, when again acted upon by the sun and air, is of course proportionately vigorous. A deep mellow loam, rather damp than dry, is undoubtedly the preferable soil for this plant, but almost any soil for so limited a species of culture, may, in the hands of a judicious gardener, be rendered suitable for it. We have seen very splendid crops of fruit upon a very stiff yellow clay, mellowed down by mixing with it anthracite coal ashes and manure.

The best season for making new plantations of the strawberry is either in spring, at a pretty early period, or directly after the beds have ceased bearing, in August. If the latter time is chosen, the plants generally get sufficiently well established to bear a considerable crop the ensuing year.

There are various modes in which to plant the beds when formed. Some arrange the plants so as to be kept in hills, others in rows, and others, again, allow them to cover the whole surface of the bed. We consider the first method preferable, as in that way the ground can be kept cultivated between the plants; the fruit is generally larger and finer, being more exposed to the genial influence of the sun, and the duration of the bed is greater. Three or four rows may be planted in each bed, at a suitable distance apart, and the runners from the rows should be shortened or cut off about three times during the season. If the plants are not thriving well, a light top dressing between the rows in autumn will be of great advantage. Burning off the upper surface of the bed in the spring has been highly recommended by some persons, but we have never found it to answer our expectations upon trial.

This fruit receives its name from the very ancient custom of placing straw on the beds, between the rows of plants, to preserve the berries clean. The custom is not yet too antiquated to be of less value to those who desire the fruit in its greatest perfection. Clean wheat or rye *chaff* may be substituted for straw, and it has the very great additional advantage of not only preventing most weeds from growing, by excluding the light, but also, by decomposing with considerable rapidity after the fruit season is past, it contributes much to the enrichment of the surface soil of the bed. Young and strong runners, well rooted, should in all cases be chosen to form the new bed, and not old plants, or those offsetts which grow near them.

There is a fact with regard to the strawberry plant little known, the ignorance of which puzzles many a good cultivator. This is the existence of separate *fertile* and *sterile* or *barren* plants in many of the varieties, otherwise plants which produce chiefly male, and others that produce only female, flowers. Botanically, the strawberry should produce both stamens and pistils in each flower, and the blossoms should consequently all mature fruit. This is really the case with the alpine, the wood strawberries, &c., but not entirely so with the large scarlet and pine strawberries. These latter sorts, it is well known, produce the largest and finest fruit; but we very often see whole beds of them in fine flourishing condition, almost entirely unproductive. The common parlance in such cases is that the variety has "run out," or degenerated, but the idea is a confused and ignorant one while the healthy aspect of the plants fully proves the vigor of the sort.

The truth is, that in all strawberries of the foregoing classes, although each blossom is furnished with stamens and pistils, yet, in some plants, the pistils are so few that they can scarcely be perceived; in others, there are scarcely any stamens visible. When the plants bear blossoms furnished with stamens only, (or in a large proportion,) they are of course *barren*: when pistils only, are produced in abundance, they are fertile. To have a bed planted so as to bear abundantly, about one plant in eight or ten should be staminate or *barren* blossoming plants; the others the *fertile* ones—for if the latter only be kept, they alone will also be found unproductive.

If any person will examine a bed of the Hudson, or any of the large scarlet strawberries, when they are in blossom, he will discover a great number of plants which bear large showy blossoms filled with fine yellow stamens. *These are the barren plants.* Here and there, also, he will discover plants bearing much smaller blossoms, filled with the heads of pistils, like a small green strawberry. The latter are the fertile ones. Now the vigor of the barren plants is so much greater than that of the fertile ones, and their offsets are so much more numerous, that if care be not taken to prevent this, they soon completely overrun and crowd out the fertile or bearing plants, and to this cause only is to be attributed the unproductive state of many beds of the large fruited strawberries, which are in many instances perhaps entirely devoid of fertile plants.

The proper method undoubtedly is to select a few fertile plants of each kind, plant them in a small bed by themselves, and allow them to increase freely by runners; then, on planting, the proper proportion could be made and kept up by the regular clipping of the runners.

Many of the fine English varieties of strawberry, (Wilmot's superb, for instance,) are generally found worthless here. This is owing, in some cases, to the ignorance or want of care of those persons who export the varieties, in sending, often, *no* fertile plants; in other instances it is equally owing to our negligence here, in not preserving the due proportion of *barren* and *fertile* plants.

This peculiarity in the blossoms is very little known or understood, even among scientific cultivators. It was first pointed out to us by our esteemed friend, N. Longworth, Esq., of Cincinnatti, one of our most distinguished Western horticulturists. Its truth we have repeatedly verified, and a slight examination will convince any person of the cause of the numerous worthless yet thrifty looking strawberry beds throughout our gardens.

The finest of the large English varieties of this fruit which we cultivate here is the Bishop's It is remarkably large, a most abundant bearer, and of superior flavor. Many of the larger berried sorts, as the Methven Castle, have been hollow and comparatively tasteless, though of uncommon size. This variety, however, appears to us to unite all that can be desired, to constitute a truly fine and delicious strawberry. A. J. D.

Farmers save your own Clover Seed.

THE subscribers having purchased the exclusive right of making, using and vending, in the counties of Monroe and Niagara, RITTENHOUSE'S PATENT CLOVER MILL, being the latest improvement, and the article now used in Pennsylvania and in Seneca county, would respectfully inform the farmers of those counties, that they will this fall furnish one or more Portable Mills in each of said counties, to be worked by horse power, which they will take to farmer's barns whenever required, and hull out their Clover Seed for them at the very cheap rate of One Dollar per bushel.—These machines will hull from one to three bushels per hour, according to the quality of the chaff. Farmers will at once perceive the vast saving and convenience afforded to them by this invention, as instead of paying from SIX to SIXTEEN Dollars per bushel for their Clover Seed, and perhaps getting a quantity of Canada Thistle or other foul seed in the bargain, they can now save their own seed, know that it is clean, and have it hulled at their own barns, for the trifling expense of One Dollar per bushel!

For further information, application can be made, either personally or by letter, (post paid,) to the subscribers at Gaines, Orleans county. CHANCY WOODWORTH & CO.

July 27, 1839.–w3m-m1t*

Morus Multicaulis.

THE subscriber is prepared to furnish Morus Multicaulis (Mulberry) Trees, in large or small quantities, delivered any time this fall after the first of October. The trees will be raised from Roots, Layers and Cuttings, of thrifty growth and matured wood, and will be sold at prices in proportion to their size. October and November are the most favorable months to transport them to the Western States, or into Canada, or in any direction where they must be sent a distance by water communication. All orders from a distance, by mail, should be sent early, (post paid,) addressed to

E. H. MIX,

July 27, 1839.–wfm Avon, N. Y.

Agricultural Warehouse and Seed Store.

79 *Barclay-street, New-York.*

AT this old established stand, the subscribers take pleasure in announcing to the public, that they have made extensive arrangements to accommodate farmers in all articles connected with husbandry, viz:—Agricultural implements, a full and fresh supply of Field and Garden Seeds, Fruit Trees, Durham Cattle, Chinese and Berkshire pigs, 10,000 Morus multicaulis Mulberry trees; Publications on Rural subjects, &c.

Published here the Rural Library, S. Fleet, editor, a few copies of 1st vol. for sale. The object of this work is to constitute a Library at the least possible expense. 2d vol., commencing with Professor Low's Elements of Practical Agriculture, with nearly 250 fine engravings; subscription $3. Subscriptions received for the Genesee Farmer, Cultivator, &c. &c. J. W. WEAVER & CO.

April 20-wm1y 76 Barlay-st, New-York

GRINDSTONES,

OF a Superior quality and warranted. If they do not answer the expectations of the purchaser, they may be returned and the money refunded. For sale at the Rochester Edge Tool Manufactory, office on Front Street, a few rods north of Main Street bridge.

june 29-w3m-m1t D. R. BARTON.

Superior Grindstones,

AND warranted. They are from the celebrated quarry at Berea, Ohio. If they do not answer the expectations of the purchaser they may be returned and the money refunded. Be particular to enquire for "*Berea Grindstones.*" For sale wholesale and retail.

D. M. VANDERPONL,

No. 17, Webster's Buildings, Main street.

Buffalo, N. Y. July 20, 1839–w3t.

Saxony Ewes.

THE Subscribers will let for a term of years, to responsible farmer, fifteen hundred Ewes, in lots of fifty or upwards, to be taken after weaning their lambs.

These Sheep belong to the White Springs flock, which is well known to be as fine as any in the country.

Terms made known on application to either of the subscribers.

ROBERT C. NICHOLAS,

Geneva, July 6, 1839.–w3m JOHN NICHOLAS.

Great Sale of Improved Short Horn Cattle, and Blood Horses.

THE subscribers will sell at Auction, on Tuesday, the 10th day of September next, at the farm of Samuel Allen, on the Niagara river, two miles below Black Rock, the entire stock of Improved SHORT HORN CATTLE, for several years past bred on the farm of L. F. Allen, on Grand Island.

The herd consists of about 30, including COWS, BULLS, HEIFERS and CALVES. Several of them have been imported by one of the subscribers direct from England, and with their produce, are surpassed by few animals in the country. In addition to these, every animal offered is the direct descendant of thorough bred imported stock, and of unquestionable purity of blood.

With the above will be sold, 20 select and beautiful animals, consisting of pure DEVON; crosses of different degrees between the Devon and Improved Short Horn; crosses of the Alderney, and of the Ayrshire, with the Short Horn. These are cows, heifers and calves; all superior animals.

ALSO—The superb Horse "BELLFOUNDER," (got by Imported "Bellfounder," the best thorough bred trotting horse ever in America, and out of the imported Mare "Lady Allport," bred by T. T. Kissam, Esq. of Long Island. The stock of this horse is unsurpassed in the country for size, speed and action. Together with several elegant THOROUGH BRED BREEDING MARES, and Fillies, and two or three young horse Colts, the produce of the above. These animals are of the highest character as roadsters; and as trotters, no blood in the country has excelled them. They are all from the best stables of Long Island. Also, a beautiful pair of full bred matched Fillies, 5 years old. All these horses are blood bay.

This entire stock will be sold without reserve to the highest bidder, commencing at 10 o'clock, A. M. They can be shipped within an hour from the farm on board the steamboats to go up the lakes, or on board the canal boats at the farm. Catalogues of the animals, with descriptions and pedigrees, will be prepared, and the stock may be viewed at the farm previous to the sale.

A credit of 60 days will be given on approved notes, or acceptances, payable at a bank either in Buffalo, Albany, or New-York, for all sums over $300. LEWIS F. ALLEN.

Black Rock, N. Y. June 25, 1839. SAMUEL ALLEN.

☞ The "Ohio Farmer" and "Lexington (Ky.) Intelligencer" will please insert the above till the first of September, and send their bills to the subscribers for payment. w&m

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county state of New York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms.

April 15, 1839. SAMUEL MOULSON.

N. B. Cash will be paid for a few thousand two years old Apple trees.

Horse Rakes.

AS some inquiry has been made through this paper relative to Horse Rakes, the subscriber would take this opportunity to say to its patrons, and all others, that he is offering to the public the latest improved Revolving Horse Rake, which can be had at the following places:

Rochester—C. Hendrix. *Auburn*—Hyell, Watrous & Co. *Elmira*—Robert Covell, jr. & Co. *Burdett*—E. Baker & Co. *Ovid*—P. Himrod & Son. *Geneva*—H. G. Bushnell. *Waterloo*—J. L. Lundy & Co. *Seneca Falls*—J. C. Chapman. *Geddes*—S. H. Mann. *Syracuse*—Wright & Wheaton. *Ithaca*—Wm. R. Collins *Lenox*—Horace Hall. *Chittenango*— —— Crouse; and many other places not here mentioned.

Those who wish to purchase, would do well to give us a call.

AMOS HOLBROOK.

Whitesboro', June 12, 1839. jun 24

Morus Multicaulis.

A FINE lot for sale; also, a few English Hawthorn of large size, a very desirable lot, by S. MOULSON,

February 27. Front-street.

Great and Timely Arrivals!

AT THE ROCHESTER SEED STORE.—The subscriber is happy to inform his friends and customers, that he has just received direct from England, a very large supply of imported Seeds, of such kinds, and in such quantities, as will meet the demands of the public, and of such quality as cannot fail to give satisfaction. Among them are,

1,500 lbs. English Purple Top Ruta Baga,
800 lbs. English and Scotch assorted Turnep,
650 lbs. Mangel Wurtzel,
300 lbs. French White and Yellow Sugar Beet,
175 lbs. Long Orange, and Altringham Carrot,
150 lbs. Yellow Dutch, and White Portugal Onion,
500 lbs. Cabbage, Cauliflower, Broccoli, and Radish,
450 lbs. White Dutch Clover, Trifolium Incarnatum.

Also—New Orchard Grass, Pacey's perennia and Italian Rye Grass, Spring Tares, Potatoe Oats, Winter Oats, many new varieties of Peas and Beans, together with a multitude of smaller articles.

Also—Nearly one hundred varieties of the choicest English FLOWER SEEDS. (These will speedily be put up in small papers, price 5 cents each, 50 cents per dozen.)

Also—Just received, a good supply of Thorburn's Chinese Tree Corn, and Rohan Potatoes.

Orders already received will be immediately attended to.

All orders from a distance must contain a remittance, or good reference in this city.

☞ Agents will receive new supplies as soon as possible.

May 1, 1839. M. B. BATEHAM.

☞ *Oswego Agency.*—M. B. Epson, Druggist, Oswego, is Agent for the Rochester Seed Store. A good assortment of Seeds may be found there.